

## EAST Search History

| Ref # | Hits | Search Query   | DBs                                       | Default Operator | Plurals | Time Stamp       |
|-------|------|--|---|------------------|---------|------------------|
| S1    | 1825 | ((carbon adj monoxide) or CO) and (H2 or hydrogen) and (syngas or (synthesis adj gas)) and (exothermic) and reactor  | USPAT                                     | OR               | OFF     | 2008/09/24 17:23 |
| S2    | 954  | ((carbon adj monoxide) or CO) and (H2 or hydrogen) and (syngas or (synthesis adj gas)) and (exothermic) and reactor and (endothermic with reforming)   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR               | OFF     | 2008/09/24 17:24 |
| S3    | 5015 | (natural with gas with (conversion or convert)) ((carbon adj monoxide) or CO) and (H2 or hydrogen) and (syngas or (synthesis adj gas)) and (exothermic) and reactor and (endothermic with reforming)     | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR               | OFF     | 2008/09/25 09:43 |
| S4    | 531  | (natural with gas with (conversion or convert)) and ((carbon adj monoxide) or CO) and (H2 or hydrogen) and (syngas or (synthesis adj gas)) and (exothermic) and reactor and (endothermic with reforming) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR               | OFF     | 2008/09/25 09:43 |

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|----|-----|---|---|----|-----|------------------|
| S5 | 607 | ((natural with gas with (conversion or convert)) or ((heat with exchange with reformer) or HER)) and ((carbon adj monoxide) or CO) and (H2 or hydrogen) and (syngas or (synthesis adj gas)) and (exothermic) and reactor and (endothermic with reforming)   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2008/09/25 09:48 |
| S6 | 15  | ("3251652"   "4494965"   "4810485"   "5861137"   "5897970"   "5938800"   "5958218"   "5993619"   "5997594"   "6063515"   "6066307"   "6348278").PN. OR ("6572837").URPN.  | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2008/09/25 10:30 |
| S7 | 63  | US-4919844-\$.DID. OR US-4442490-\$.DID. OR US-8168453-\$.DID. OR US-5362453-\$.DID. OR US-5311894-\$.DID. OR US-8993473-\$.DID. OR US-4731098-\$.DID. OR US-9831588-\$.DID. OR US-2198743-\$.DID. OR US-4337170-\$.DID. OR US-7062982-\$.DID. OR US-1238044-\$.DID. OR US-4442020-\$.DID. OR US-2041084-\$.DID. OR US-5068058-\$.DID. OR US-8112691-\$.DID. OR US-5489501-\$.DID. OR US-5011625-\$.DID. OR US-2543091-\$.DID. OR US-5122299-\$.DID. OR US-9616192-\$.DID. OR US-3149142-\$.DID. OR US-4294720-\$.DID. OR US-1011381-\$.DID. OR US-1277942-\$.DID. OR US-4265868-\$.DID. OR US-8685581-\$.DID. OR US-9832817-\$.DID. OR US-1773098-\$.DID. OR US-4122400-\$.DID. OR US-2612000-\$.DID. OR US-3070629-\$.DID. OR | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2008/09/25 10:56 |

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|-----|----|--|---------------------------|----|-----|---------------------|
|     |    | US-2982803-\$.DID. OR<br>US-9426656-\$.DID. OR<br>US-6112494-\$.DID. OR<br>US-4340688-\$.DID. OR<br>US-8860195-\$.DID. OR<br>US-860195D-\$.DID. OR<br>US-2168718-\$.DID. OR<br>US-1862586-\$.DID. OR<br>US-1180495-\$.DID. OR<br>US-5220102-\$.DID. OR<br>US-9332900-\$.DID. |                           |    |     |                     |
| S8  | 1  | "4758258".pn.  | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/25<br>11:07 |
| S9  | 0  | "2003136146"   | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/25<br>11:07 |
| S10 | 0  | "2003/136146"  | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/25<br>11:07 |
| S11 | 1  | "2003/0136146"   | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/25<br>11:08 |
| S12 | 22 | ((SHOOU-I) near2<br>(WANG)).INV.   | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/25<br>11:10 |
| S13 | 8  | ("3607125"   "3909299"<br>  "4830834"  <br>"4959079"   "5199961"<br>  "5935531").PN. OR<br>("6793700").URPN.   | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/25<br>11:14 |
| S14 | 1  | "6224789".pn.  | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/25<br>11:20 |
| S15 | 9  | ("4985231"  <br>"6077459").PN. OR<br>("6224789").URPN.   | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/25<br>11:20 |
| S16 | 5  | 09/965979  | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/25<br>11:29 |
| S17 | 0  | 09/0965979   | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/25<br>11:30 |
| S18 | 2  | ("4132065").PN. OR<br>("6669744").URPN.  | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/25<br>11:30 |
| S19 | 1  | "6217681".pn.  | USPAT                     | OR | OFF | 2008/09/25<br>11:47 |
| S20 | 1  | "4132065".pn.  | USPAT                     | OR | OFF | 2008/09/27<br>16:23 |
| S21 | 1  | 10/524325  | US-PGPUB;<br>USPAT        | OR | OFF | 2008/09/28<br>11:37 |
| S22 | 11 | "4782096"  | US-PGPUB;<br>USPAT        | OR | OFF | 2008/09/28<br>11:42 |
| S23 | 1  | "4782096".pn.  | US-PGPUB;<br>USPAT        | OR | OFF | 2008/09/28<br>11:42 |

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|-----|------|--|---|----|-----|------------------|
| S24 | 6257 | ((partial adj oxidation) or POX) and (refor\$4 or HER or EHTR)   | US-PGPUB; USPAT                           | OR | OFF | 2008/09/28 11:51 |
| S25 | 3151 | ((partial adj oxidation) or POX) and (refor\$4 or HER or EHTR) and (natural adj gas)   | US-PGPUB; USPAT                           | OR | OFF | 2008/09/28 11:51 |
| S26 | 2084 | ((partial adj oxidation) or POX) and (refor\$4 or HER or EHTR) and (natural adj gas) and (syngas or (synthesis adj gas))   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2008/09/28 11:52 |
| S27 | 0    | 2002/0103264   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2008/09/28 12:12 |
| S28 | 2    | "20020103264"  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2008/09/28 12:12 |
| S29 | 0    | "5252609.pn"   | USPAT                                     | OR | OFF | 2008/09/29 11:33 |
| S30 | 1    | "5252609".pn.  | USPAT                                     | OR | OFF | 2008/09/29 11:33 |
| S31 | 2    | "4631182".pn.<br>"4824658".pn.   | USPAT                                     | OR | OFF | 2008/09/29 11:34 |
| S32 | 1    | "4919844".pn.  | USPAT                                     | OR | OFF | 2008/09/29 13:52 |
| S33 | 63   | US-4919844-\$.DID. OR<br>US-4442490-\$.DID. OR<br>US-8168453-\$.DID. OR<br>US-5362453-\$.DID. OR<br>US-5311894-\$.DID. OR<br>US-8993473-\$.DID. OR<br>US-4731098-\$.DID. OR<br>US-9831588-\$.DID. OR<br>US-2198743-\$.DID. OR<br>US-4337170-\$.DID. OR<br>US-7062982-\$.DID. OR<br>US-1238044-\$.DID. OR<br>US-4442020-\$.DID. OR<br>US-2041084-\$.DID. OR<br>US-5068058-\$.DID. OR<br>US-8112691-\$.DID. OR<br>US-5489501-\$.DID. OR<br>US-5011625-\$.DID. OR<br>US-2543091-\$.DID. OR<br>US-5122299-\$.DID. OR<br>US-9616192-\$.DID. OR<br>US-3149142-\$.DID. OR | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2008/09/29 14:32 |

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|-----|----|--|---------------------------|----|-----|---------------------|
|     |    | US-4294720-\$.DID. OR<br>US-1011381-\$.DID. OR<br>US-1277942-\$.DID. OR<br>US-4265868-\$.DID. OR<br>US-8685581-\$.DID. OR<br>US-9832817-\$.DID. OR<br>US-1773098-\$.DID. OR<br>US-4122400-\$.DID. OR<br>US-2612000-\$.DID. OR<br>US-3070629-\$.DID. OR<br>US-2982803-\$.DID. OR<br>US-9426656-\$.DID. OR<br>US-6112494-\$.DID. OR<br>US-4340688-\$.DID. OR<br>US-8860195-\$.DID. OR<br>US-860195D-\$.DID. OR<br>US-2168718-\$.DID. OR<br>US-1862586-\$.DID. OR<br>US-1180495-\$.DID. OR<br>US-5220102-\$.DID. OR<br>US-9332900-\$.DID. |                           |    |     |                     |
| S34 | 8  | ((SHOOU-I) near2<br>(WANG)).INV.   | EPO; JPO;<br>DERWENT      | OR | OFF | 2008/09/29<br>15:17 |
| S35 | 20 | ((JOHN) near2<br>(REPASKY)).INV.   | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/29<br>15:17 |
| S36 | 4  | ((JOHN) near2<br>(REPASKY)).INV.   | EPO; JPO;<br>DERWENT      | OR | OFF | 2008/09/29<br>15:17 |
| S37 | 25 | ((SHANKAR) near2<br>(NATARAJ)).INV.  | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/29<br>15:17 |
| S38 | 12 | ((SHANKAR) near2<br>(NATARAJ)).INV.  | EPO; JPO;<br>DERWENT      | OR | OFF | 2008/09/29<br>15:17 |
| S39 | 12 | ((XIANG-DONG) near2<br>(PENG)).INV.  | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2008/09/29<br>15:17 |
| S40 | 5  | ((XIANG-DONG) near2<br>(PENG)).INV.  | EPO; JPO;<br>DERWENT      | OR | OFF | 2008/09/29<br>15:17 |
| S41 | 1  | "20020103264"  | US-PGPUB;<br>USPAT        | OR | OFF | 2009/02/24<br>16:21 |
| S42 | 1  | "20020155061"  | US-PGPUB;<br>USPAT        | OR | OFF | 2009/02/24<br>16:22 |
| S43 | 2  | S41 or S42   | US-PGPUB;<br>USPAT        | OR | OFF | 2009/02/24<br>16:39 |
| S44 | 2  | S43 and (exchange<br>reformer)   | US-PGPUB;<br>USPAT        | OR | OFF | 2009/02/24<br>16:39 |

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|-----|----|---|--|----|-----|---------------------|
| S47 | 14 | ((carbon adj monoxide) or CO) and ("H.sub.2" or hydrogen) and (syngas or (synthesis adj gas)) and (exothermic) and reactor and (heat adj exchange adj reformer) | USPAT  | OR | OFF | 2009/02/24<br>16:41 |
| S48 | 8  | ((SHOOU-I) near2 (WANG)).INV.   | EPO; JPO;<br>DERWENT                               | OR | OFF | 2009/02/25<br>10:07 |
| S49 | 22 | ((JOHN) near2 (REPASKY)).INV.   | US-PGPUB;<br>USPAT; USOCR                          | OR | OFF | 2009/02/25<br>10:07 |
| S50 | 4  | ((JOHN) near2 (REPASKY)).INV.   | EPO; JPO;<br>DERWENT                               | OR | OFF | 2009/02/25<br>10:07 |
| S51 | 28 | ((SHANKAR) near2 (NATARAJ)).INV.  | US-PGPUB;<br>USPAT; USOCR                          | OR | OFF | 2009/02/25<br>10:07 |
| S52 | 12 | ((SHANKAR) near2 (NATARAJ)).INV.  | EPO; JPO;<br>DERWENT                               | OR | OFF | 2009/02/25<br>10:07 |
| S53 | 13 | ((XIANG-DONG) near2 (PENG)).INV.  | US-PGPUB;<br>USPAT; USOCR                          | OR | OFF | 2009/02/25<br>10:07 |
| S54 | 5  | ((XIANG-DONG) near2 (PENG)).INV.  | EPO; JPO;<br>DERWENT                               | OR | OFF | 2009/02/25<br>10:07 |
| S55 | 15 | (S48 S49 S50 S51 S52 S53 S54) and reformer  | USPAT  | OR | OFF | 2009/02/25<br>10:07 |
| S56 | 22 | ((SHOOU-I) near2 (WANG)).INV.   | US-PGPUB;<br>USPAT; USOCR                          | OR | OFF | 2009/02/25<br>10:08 |
| S57 | 8  | (S48 S49 S50 S51 S52 S53 S54 S56) and (heat with exchange with reformer)  | USPAT  | OR | OFF | 2009/02/25<br>10:08 |
| S58 | 8  | (S48 S49 S50 S51 S52 S53 S54 S56) and (heat with exchange with reformer)  | USPAT  | OR | ON  | 2009/02/25<br>10:09 |
| S59 | 2  | syngas and ((partial adj oxidation) with diluent with coo\$4)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | OR | ON  | 2009/02/27<br>09:50 |
| S60 | 21 | syngas and ((partial adj oxidation) with ((diluent or (carbon adj dioxide)) or "cO.sub.2") with coo \$4)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | OR | ON  | 2009/02/27<br>10:01 |
| S61 | 21 | syngas and ((partial adj oxidation) with ((diluent or (carbon adj dioxide) or "cO.sub.2")) with coo \$4)  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | OR | ON  | 2009/02/27<br>10:03 |

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| S62 | 15  | syngas with ((partial adj oxidation) with ((diluent or (carbon adj dioxide) or "cO.sub.2")) with coo \$4)                           | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/02/27 10:03 |
| S63 | 110 | syngas with (((diluent or (carbon adj dioxide) or "cO.sub.2")) with coo \$4)  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/02/27 10:04 |
| S64 | 24  | syngas with (((diluent or (carbon adj dioxide) or "cO.sub.2")) with coo\$4 with catalyst)   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/02/27 10:05 |
| S65 | 31  | syngas same (((diluent or (carbon adj dioxide) or "cO.sub.2")) with coo \$4 with catalyst)  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/02/27 10:07 |
| S66 | 7   | ("20030171442"   "20040047800"   "5011625"   "5122299"   "5362454"   "6855272"   "7074347"). PN. OR ("7220505"). URPN.              | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/02/27 10:10 |
| S67 | 19  | syngas same (((diluent or (carbon adj dioxide) or "cO.sub.2")) with coo \$4 with catalyst) and (partial adj oxidation)              | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/02/27 10:12 |
| S68 | 324 | syngas same ((partial adj oxidation) and ((carbon adj dioxide) or "cO.sub.2") with refor \$4)                                       | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/02/27 10:36 |
| S69 | 13  | syngas same ((partial adj oxidation) with ((water with shift) and ((carbon adj dioxide) or "cO.sub.2")) with refor \$4)             | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/02/27 10:59 |
| S70 | 0   | syngas same ((partial adj oxidation) with ((water with shift) and (((carbon adj dioxide) or "cO.sub.2")) and coo\$4) with refor\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/02/27 11:01 |

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|-----|----|--|---|----|-----|------------------|
| S71 | 18 | syngas same ((partial adj oxidation) and ((water with shift) and (((carbon adj dioxide) or "cO.sub.2")) and coo\$4) with refo\$4)  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/02/27 11:02 |
| S72 | 8  | ("4365006"   "4988283"   "5264202"   "5417051"   "5752995"   "5852925"   "6200128"   "6217681"). PN. OR ("6981994"). URPN.   | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/02/27 13:35 |
| S73 | 59 | US-4919844-\$.DID. OR US-4442490-\$.DID. OR US-6166453-\$.DID. OR US-5362453-\$.DID. OR US-3111894-\$.DID. OR US-6993473-\$.DID. OR US-4731098-\$.DID. OR US-8311588-\$.DID. OR US-2198743-\$.DID. OR US-4337170-\$.DID. OR US-7062982-\$.DID. OR US-1238044-\$.DID. OR US-4442020-\$.DID. OR US-2041084-\$.DID. OR US-5068058-\$.DID. OR US-8112691-\$.DID. OR US-6489501-\$.DID. OR US-5011625-\$.DID. OR US-2543091-\$.DID. OR US-5122299-\$.DID. OR US-9616192-\$.DID. OR US-4294720-\$.DID. OR US-4265868-\$.DID. OR US-8515181-\$.DID. OR US-9832817-\$.DID. OR US-7130198-\$.DID. OR US-4122400-\$.DID. OR US-2612000-\$.DID. OR US-3070629-\$.DID. OR US-2982803-\$.DID. OR US-9426656-\$.DID. OR US-6112494-\$.DID. OR US-4340688-\$.DID. OR US-8860195-\$.DID. OR US-860195D-\$.DID. OR US-2168718-\$.DID. OR US-1862586-\$.DID. OR US-1180495-\$.DID. OR US-9332900-\$.DID. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2009/02/27 13:40 |

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|-----|-----|--|---|----|-----|------------------|
| S74 | 32  | syngas same ((partial adj oxidation) and (reverse with water with shift with gas))   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/02/27 14:31 |
| S75 | 27  | syngas same ((partial adj oxidation) and (reverse adj water with shift with gas))  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/02/27 14:35 |
| S76 | 214 | ((partial adj oxidation) and (reverse adj water with shift with gas))  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/02/27 14:41 |
| S77 | 14  | ("3097082"   "3723344").PN. OR ("3919114").URPN.   | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/02/27 14:49 |
| S78 | 28  | ("4791079"   "4793904"   "4802958"   "4933054"   "5068058"   "5160713"   "5276237"   "5306411"   "5356728"   "5364506"   "5534471"   "5573737"   "5580497"   "5591315"   "5599383"   "5846641"   "5868918").PN. OR ("6077323").URPN. | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/02/27 15:01 |
| S79 | 2   | "6929668".pn.  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/03/02 12:27 |
| S80 | 11  | ("5057164"   "5073356"   "5160456"   "5238057"   "5486313"   "5538706"   "5624964"   "5720901"   "5746985"   "5968457").PN. OR ("6929668").URPN.   | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/03/02 12:28 |
| S81 | 32  | ("4927857"   "5087271"   "5149464"   "5250083"   "5252609").PN. OR ("5720901").URPN.   | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/03/02 12:42 |
| S82 | 418 | (partial adj oxidation) with (water and cool\$4)   | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/03/02 12:43 |
| S83 | 2   | "20050074395"  | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/03/02 12:46 |

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|-----|----|--|---|----|-----|------------------|
| S84 | 7  | ("20030047716"   "2818326"   "4605423"   "4704137"   "4705542"   "6833013"). PN. OR ("7163647"). URPN.   | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/03/02 12:46 |
| S85 | 18 | ("2767806"   "2931715"   "2971830"   "4074981"   "4218423"). PN. OR ("4605423"). URPN.   | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/03/02 12:50 |
| S86 | 7  | ("4377394"   "4605423"   "4768470"   "4848982"   "4859213"). PN. OR ("5976203"). URPN.   | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/03/02 12:51 |
| S87 | 3  | (partial adj oxidation) with ((quenc\$4 with cooling) with catalyst)   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/03/02 12:53 |
| S88 | 6  | (partial adj oxidation) with ((quenc\$4 and cooling) with catalyst)  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/03/02 12:53 |
| S89 | 33 | (partial adj oxidation) and ((quenc\$4 with cooling) with catalyst)  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/03/02 12:55 |
| S90 | 27 | ("2384874"   "3353924"   "3433600"   "3433609"   "3475136"   "3498756"   "3598527"   "3694169"   "3705016"   "3746515"   "3784361"   "4311671"   "4367206").PN. OR ("4411877").URPN. | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/03/02 13:00 |
| S91 | 27 | ("2384874"   "3353924"   "3433600"   "3433609"   "3475136"   "3498756"   "3598527"   "3694169"   "3705016"   "3746515"   "3784361"   "4311671"   "4367206").PN. OR ("4411877").URPN. | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2009/03/02 13:00 |

|     |    |   |                           |    |     |                     |
|-----|----|---|---------------------------|----|-----|---------------------|
| S92 | 54 | ( "1899184"   "2481217"<br>  "2585737"  <br>"2607670"   "2612444"<br>  "2662004"  <br>"2662912"   "2671719"<br>  "2678264"  <br>"2709645"   "2844453"<br>  "3170017"  <br>"3650519"   "3873073"<br>  "3970474"  <br>"4062657"   "4126668"<br>  "4132764"  <br>"4205194"   "4406666"<br>  "4443644"  <br>"4443646"   "4443647"<br>  "4544784"  <br>"4560821"   "4582630"<br>  "4665260"  <br>"4925456"   "5011625"<br>  "5112527"  <br>"5130286"   "5177304"<br>  "5298233").PN. OR<br>("5478370").URPN.   | US-PGPUB;<br>USPAT; USOCR | OR | OFF | 2009/03/02<br>13:11 |
| S93 | 50 | (US-6069180-\$ or US-<br>4279830-\$ or US-<br>4497637-\$ or US-<br>4568364-\$ or US-<br>4840931-\$ or US-<br>4946477-\$ or US-<br>4980145-\$ or US-<br>5218003-\$ or US-<br>5232467-\$ or US-<br>5435814-\$ or US-<br>5474596-\$ or US-<br>5478370-\$ or US-<br>5498370-\$ or US-<br>5645615-\$ or US-<br>5669960-\$ or US-<br>5947063-\$ or US-<br>5993517-\$ or US-<br>6045603-\$ or US-<br>6156872-\$ or US-<br>6191066-\$ or US-<br>4409412-\$ or US-<br>4525187-\$ or US-<br>4540810-\$ or US-<br>4556645-\$ or US-<br>4568663-\$ or US-<br>4600499-\$).did. or (US-<br>4605678-\$ or US-<br>4606811-\$ or US-<br>4617320-\$ or US-<br>4617288-\$ or US-<br>4619910-\$ or US-<br>4628066-\$ or US- | USPAT                     | OR | OFF | 2009/03/06<br>10:50 |

|     |    |  |  |    |     |                     |
|-----|----|--|--|----|-----|---------------------|
|     |    | 4778484-\$ or US-<br>4778485-\$ or US-<br>4801573-\$ or US-<br>4857559-\$ or US-<br>4863492-\$ or US-<br>4880439-\$ or US-<br>4942734-\$ or US-<br>5210060-\$ or US-<br>5221652-\$ or US-<br>5321185-\$ or US-<br>5336825-\$ or US-<br>5382271-\$ or US-<br>5384335-\$ or US-<br>5441990-\$ or US-<br>5459166-\$ or US-<br>5547648-\$ or US-<br>5560900-\$ or US-<br>5626794-\$).did.  |  |    |     |                     |
| S94 | 20 | S93 and (two with reactor)   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO; DERWENT | OR | ON  | 2009/03/06<br>10:51 |
| S95 | 54 | ("1899184"   "2481217"<br>  "2585737"  <br>"2607670"   "2612444"<br>  "2662004"  <br>"2662912"   "2671719"<br>  "2678264"  <br>"2709645"   "2844453"<br>  "3170017"  <br>"3650519"   "3873073"<br>  "3970474"  <br>"4062657"   "4126668"<br>  "4132764"  <br>"4205194"   "4406666"<br>  "4443644"  <br>"4443646"   "4443647"<br>  "4544784"  <br>"4560821"   "4582630"<br>  "4665260"  <br>"4925456"   "5011625"<br>  "5112527"  <br>"5130286"   "5177304"<br>  "5298233").PN. OR<br>("5478370").URPN. | US-PGPUB;<br>USPAT; USOCR                          | OR | OFF | 2009/03/06<br>10:52 |
| S96 | 38 | S95 and ((carbon adj<br>dioxide) or "co.sub.2")  | US-PGPUB;<br>USPAT; USOCR                          | OR | OFF | 2009/03/06<br>10:53 |

|      |    |  |                        |    |     |                  |
|------|----|--|------------------------|----|-----|------------------|
| S97  | 30 | ("1202995"   "1376514"   "1830167"   "1849357"   "2955909"   "3442619"   "3539292"   "3576603"   "3619142"   "3821362"   "3880987"). PN. OR ("4126668"). URPN.   | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/03/06 11:02 |
| S98  | 0  | (multi adj stage) with (syn and gas) with ((carbon adj dioxide) or "co.sub.2")   | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/03/06 11:07 |
| S99  | 5  | (multi adj stage) with (synthesis and gas) with ((carbon adj dioxide) or "co.sub.2")   | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/03/06 11:08 |
| S100 | 54 | ("1899184"   "2481217"   "2585737"   "2607670"   "2612444"   "2662004"   "2662912"   "2671719"   "2678264"   "2709645"   "2844453"   "3170017"   "3650519"   "3873073"   "3970474"   "4062657"   "4126668"   "4132764"   "4205194"   "4406666"   "4443644"   "4443646"   "4443647"   "4544784"   "4560821"   "4582630"   "4665260"   "4925456"   "5011625"   "5112527"   "5130286"   "5177304"   "5298233"). PN. OR ("5478370"). URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/03/06 11:10 |
| S101 | 5  | (multi with stage) with (synthesis and gas) with ((carbon adj dioxide) or "co.sub.2")  | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/03/06 11:10 |
| S102 | 33 | (multi with stage) with (synthesis and gas) and ((carbon adj dioxide) or "co.sub.2")   | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/03/06 11:10 |
| S103 | 1  | "5720901".pn.  | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/03/06 14:16 |

|      |    |  |   |    |     |                     |
|------|----|--|---|----|-----|---------------------|
| S104 | 40 | (US-20030113257-\$ or US-20030110694-\$ or US-20030110693-\$ or US-20030070808-\$ or US-20020103264-\$ or US-20030162846-\$ or US-20020173556-\$ or US-20020155061-\$ or US-20040182002-\$ or US-20080069765-\$ or US-20060029539-\$ or US-20050261382-\$ or US-20050074395-\$ or US-20030047716-\$).did. or (US-6572837-\$ or US-4758258-\$ or US-7074347-\$ or US-7241401-\$ or US-6534551-\$ or US-4132065-\$ or US-5252609-\$ or US-4919844-\$ or US-6048472-\$ or US-6981994-\$ or US-6114400-\$ or US-6214066-\$ or US-7375051-\$ or US-5500149-\$ or US-6077323-\$ or US-5538706-\$ or US-5720901-\$ or US-4605423-\$ or US-4411877-\$ or US-4126668-\$ or US-5112527-\$).did. or (US-2620348-\$ or US-2529630-\$).did. or (WO-3080503-\$).did. or (US-5122299-\$ or WO-2008115933-\$).did. | US-PGPUB; USPAT; USOCR; EPO; DERWENT      | OR | OFF | 2009/03/06<br>14:18 |
| S105 | 28 | S104 and (heat with exchanger)   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2009/03/06<br>14:18 |
| S106 | 31 | (multi with stage) with (synthesis and gas) and ((carbon adj dioxide) or "co.sub.2") and cool\$4   | US-PGPUB; USPAT; USOCR                    | OR | ON  | 2009/03/06<br>14:27 |
| S107 | 1  | (multi with stage) with (synthesis and gas) and ((carbon adj dioxide) or "co.sub.2") and cool\$4   | EPO; JPO; DERWENT                         | OR | ON  | 2009/03/06<br>15:08 |

|      |     |  |                   |    |    |                  |
|------|-----|--|-------------------|----|----|------------------|
| S108 | 537 | (synthesis and gas) and ((carbon adj dioxide) or "co.sub.2") and cool\$4             | EPO; JPO; DERWENT | OR | ON | 2009/03/06 15:10 |
| S109 | 549 | (synthesis and gas) and ((carbon adj dioxide) or "co.sub.2") and coo\$4              | EPO; JPO; DERWENT | OR | ON | 2009/03/06 15:10 |
| S110 | 272 | (synthesis and gas) with ((carbon adj dioxide) or "co.sub.2") and coo\$4             | EPO; JPO; DERWENT | OR | ON | 2009/03/06 15:10 |
| S111 | 3   | (synthesis and gas) with ((carbon adj dioxide) or "co.sub.2") and coo\$4 and diluent | EPO; JPO; DERWENT | OR | ON | 2009/03/06 15:11 |
| S112 | 9   | (synthesis and gas) with ((carbon adj dioxide) or "co.sub.2") and diluent            | EPO; JPO; DERWENT | OR | ON | 2009/03/06 15:15 |

**3/10/2009 11:16:20 AM**

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